REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for the notice that claims 6, 19 and 32 would be allowable if rewritten in independent form. These claims were previously indicated as allowable in previous office actions and as such, Applicants have added new independent claims that rewrite claims 6, 19 and 32 in independent form based on when they were indicated to be allowable.

Claims 1, 4-5, 7-14, 17-18, 20-27, 30-31 and 33-39 stand rejected under 35 U.S.C. §102(e) as being anticipated by Donham et al. Applicants have amended the independent claims to indicate an example of the texture operations that are performed in addition to color operations by a single ALU/memory pair which is different from the Donham reference. For example, as claimed, a unified shading apparatus or method utilizes at least one ALU/memory pair that is operative to perform both texture operations and color operations. The ALU/memory pair performs both color operations and texture operations that include at least one of issuing a texture request to a texture unit and writing received texture values to the memory of the ALU/memory pair. (See for example, Specification page 12 and elsewhere). Such combined operations are not described or taught in the Donham reference.

For example, the office action cites a microblender 72, 73 and FIFO 74 as allegedly equating to the claimed ALU and/or memory pair. However, Donham utilizes a structure that requires two ALUs and the ALUs do not perform the texture operations as claimed. To the contrary, Donham requires a separate ALU and memory (see for example, 60 and FIFO 65) to perform the claimed texture operations and a different ALU and FIFO (72, 73 and 74) to perform color operations. As such, the Donham reference utilizes a different ALU/FIFO to perform

texture operations and a separate and different ALU/FIFO to perform color operations. Moreover, these separate ALU operations are sequentially performed by separate ALUs in Donham (see for example, FIG. 2 of Donham). As such, Applicants' claims are in condition for allowance. In addition, the Donham reference requires independent FIFO 65 and 74 neither of which are accessible by other respective ALUs to carry out its operations. In contrast, as claimed, the ALU/memory pair utilizes a single ALU/memory to request texture information and/or memory that stores both received texture values fetched from, for example, a texture cache and color values and the ALU utilizes the memory to perform both texture operations and color operations. Other differences will be recognized by those of ordinary skill in the art.

Claims 2, 3, 15, 16, 28 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Donham et al. in view of Zatz. Applicants respectfully submit that these claims are also in condition for allowance as at least depending upon allowable base claims and/or for including novel and non-obvious subject matter.

Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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